An Osteopathic Approach to Temporomandibular Joint Disorder in an Ehlers-Danlos Patient

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Introduction/Background:

Ehlers-Danlos syndrome (EDS) is a collection of rare connective tissue disorders affecting the development of collagen. Temporomandibular joint disorder (TMD) is a common complication of EDS secondary to hypermobility of the temporomandibular joint (TMJ). TMD manifests as crepitus, myalgias, arthralgias, and headaches.

Case:

A 34-year-old female presented with a four-year history of intermittent bilateral headaches and jaw "clicking" secondary to TMD. The headaches were described as throbbing, occipitotemporal pain, with 8/10 severity. The frequency was four per month lasting 6-8 hours. The osteopathic manipulative treatment (OMT) protocol included muscle energy of the mandible, inhibition of the muscles of mastication, and the osteopathic cranial manipulative medicine techniques: temporal rocking, sphenoid lift, and v-spread. The patient was also instructed to perform Rocabado exercises to improve the strength of the TMJ. Incidentally, the patient has a history of recurrent left patella subluxation secondary to the EDS.

Results:

The patient kept a headache diary over the course of eight treatments and demonstrated instantaneous improvements. With routine OMT, the frequency of headaches was reduced to an average of one per month. The patient also reported decreased TMJ crepitus and her pain with chewing diminished. Remarkably, the patient reported a reduction in the frequency of patella subluxations. This outcome suggests that the patient's jaw dysfunction and resultant fascial distortions may have contributed to the patient's patellar subluxations.

Discussion:

This case study suggests that OMT is effective in reducing headaches and crepitus in EDS patients with TMD. It also suggests that significant somatic dysfunction and fascial distortion at one body region can affect distant musculoskeletal sites. A limitation of the study was a lack of objective measurements to assess jaw alignment before and after treatment.